



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

GAF

1361 Alps Road
Wayne, NJ 07470

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF Conventional Built-Up Roof Systems for Lightweight Concrete Deck

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises and renews NOA No. 08-0922.03 consists of pages 1 through 15.
The submitted documentation was reviewed by Juan E. Collao, R.A.



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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR
Material: Fiberglass
Deck Type: Lightweight Concrete
Maximum Design Pressure: -112.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Topcoat [®] Surface Seal SB	5 or 55 gallons	ASTM D 6083	Solvent based sprayable thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase a roof's reflectivity.
Topcoat [®] Elastomeric Roofing Membrane	1, 5 or 55 gallons	ASTM D6083	An acrylic, water based elastomeric membrane system designed to protect various types of roofing surfaces.
Topcoat [®] MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer used to block asphalt bleed-through.
GAFGlas [®] Ply 4	39.37" (1 meter) Wide	ASTM D 2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGlas [®] FlexPly [™] 6	39.37" (1 meter) Wide	ASTM D 2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGlas [®] #75 Base Sheet	39.37" (1 meter) Wide	ASTM D 4601	Type II asphalt impregnated and coated glass mat base sheet.
GAFGlas [®] #80 Ultima [™] Base Sheet	39.37" (1 meter) Wide	ASTM D 4601	Type II asphalt impregnated and coated, fiberglass base sheet.
GAFGlas [®] Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGlas [®] EnergyCap [™] BUR Mineral Surface Cap Sheet	39.37" (1 meter) wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules with factory applied EnergyCote [™]
GAFGlas [®] Stratavent [®] Eliminator [™] Perforated Venting Base Sheet	39.37" (1 meter) wide	ASTM D 4897	Fiberglass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating with factory perforations.
GAFGlas [®] Stratavent [®] Eliminator [™] Nailable Venting Base Sheet	39.37" (1 meter) wide	ASTM D 4897	Fiberglass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:**TABLE 1**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Ruberoid® SBS Heat-Weld™ Smooth	39.37" (1 meter) wide	ASTM D 6164	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® SBS Heat-Weld™ Granule	39.37" (1 meter) wide	ASTM D 6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® 20	39.37" (1 meter) wide	ASTM D 6163	SBS modified asphalt base sheet and interply sheet reinforce with a glass fiber mat.
Ruberoid® Mop Granule	39.37" (1 meter) wide	ASTM D 6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® Mop Smooth	39.37" (1 meter) wide	ASTM D 6164	Non-woven polyester mat coated with polymer modified asphalt and smooth surfaced.

APPROVED INSULATIONS:**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Composite Polyiso Insulation	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation	GAF
EnergyGuard™ Perlite Roof Insulation	Perlite insulation board.	GAF
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF
Structodek® High Density Fiber Board	High Density fiber board	Blue Ridge FiberBoard, Inc.
DensDeck® Roof Board	Gypsum Board	G-P Gypsum Corp.
Securock® Gypsum-Fiber Roof Board	Gypsum roof board	USG Corporation

APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Drill-Tec™ Base Sheet Fastener (1.2 in.)	Base sheet fastening assembly.	1.2 in.	GAF
2.	Drill-Tec™ Base Sheet Fastener (1.7 in.)	Base sheet fastening assembly.	1.7 in.	GAF
3.	Drill-Tec™ Locking Impact Nail	Base Sheet fastener for lightweight concrete, Gypsum & Tectum decks.	various	GAF
4.	Drill-Tec™ #12 Fastener	Insulation fastener and Base Ply fastener.	various	GAF
5.	Drill-Tec™ 3" Steel Plates	Round Galvalume plates.	3"	GAF



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corp.	FMRC 1996	Current Insulation Attachment Requirements	01/01/96
	J.I. 2B8A4.AM	Wind Uplift	07/02/97
	J.I. 3B9Q1.AM	FMRC 44704	01/08/98
	J.I. 0D0A8.AM		07/09/99
	J.I. 0Y9Q5.AM	Wind Uplift	04/01/98
	3017250	FMRC 4470 - TAS 114 4470	05/05/04
IRT-Arcon, Inc.	00001 & 00002	Wind Uplift	04/05/00
	01-0136	TAS 114	12/18/01
Exterior Research & Design, LLC	4674.11.01-1	TAS 114	11/21/01
	J.I. 0D1A8.AM	FMRC 4470 - TAS 114	07/29/94
Trinity ERD	G6850.08.07-1	ASTM D 3909	08/13/07
	G34140.04.11-4	ASTM D 4601	04/25/11
	G30250.02.10-3-R1	ASTM D 3909	11/26/12
	G34140.04.11-5	ASTM D 4897	04/25/11
	G34140.04.11-5-R1	ASTM D 4897	10/18/13
	G34140.04.11-2	ASTM D 6163	04/25/11
PRI	G31360.03.10	ASTM D 6164	03/31/10
	GAF-082-02-01	ASTM D 6083	05/09/06
	GAF-084-02-01	ASTM D 6083	05/09/06
	GAF-314-02-01	ASTM D 2178	08/23/11
	GAF-315-02-01	ASTM D 2178	08/23/11
	GAF-209.111-02-01	ASTM D 6089	05/05/09
Momentum Technologies, Inc.	EX14A3A	ASTM D 6083	03/20/03

APPROVED ASSEMBLIES

- Deck Type : Lightweight Concrete, Insulated
- Deck Description: Cellular or Aggregate Lightweight Concrete
- System Type A(1): Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.
- Deck: 18-22 ga. steel deck shall be secured 6" o.c. to structural supports spaced a maximum of 5 ft. on centers with 5/8" puddle welds.

All General and System Limitations shall apply.

Anchor Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet or Ruberoid® 20 mechanically fastened as described below.

- Fasteners: Drill-Tec™ Base Sheet Fasteners at a fastener spacing of 9" o.c. at the 2" wide side laps and 9" o.c. in two equally spaced rows in the field of the base sheet.
- Or
- Drill-Tec™ Base Sheet Fasteners at a fastener spacing of 12" o.c. at the 2" wide side laps and 9" o.c. in three equally spaced rows in the field of the base sheet.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick	N/A	N/A
EnergyGuard™ Perlite Recover Board, EnergyGuard™ Perlite Roof Insulation, Dens Deck® Roof Board, Structodeck® High Density Fiber Board, Securock® Gypsum-Fiber Roof Board Minimum ½" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate insulation applications.

- Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20 or GAFGLAS® #75 Base Sheet adhered to the insulation in a full mopping of an approved asphalt at an application rate of 25 lbs./sq. ± 15% or adhered in a strip or spot mopping of an approved asphalt (see General Limitation #4).
- Ply Sheet: One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



- Cap Sheet:** (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing:** **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**
1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
 2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
- Maximum Design Pressure:** -45 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Insulated

Deck Description: Cellular or Aggregate Lightweight Concrete

System Type A(2): Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.

Deck: 18-22 ga. steel deck shall be secured 6" o.c. to structural supports spaced a maximum of 5 ft. on centers with 5/8" puddle welds.

All General and System Limitations apply.

Anchor Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet mechanically fastened as described below.

Fastening: Drill-Tec™ Base Sheet Fasteners spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ PolyIso Insulation, EnergyGuard™ RA PolyIso Insulation, EnergyGuard™ RN PolyIso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1½" thick	N/A	N/A
EnergyGuard™ Perlite® Roof Insulation, Dens Deck® Roof Board, Structodeck® High Density Fiber Board, Securock® Gypsum-Fiber Roof Board Minimum ½" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® STRATAVENT® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate insulation applications.

Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20 or GAFGLAS® #75 Base Sheet adhered to the insulation in a full mopping of an approved asphalt at an application rate of 25 lbs./sq. ± 15% or adhered in a strip or spot mopping of an approved asphalt; (see General Limitation #4).

Ply Sheet: One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat[®] Elastomeric Roofing Membrane, Topcoat[®] MB Plus (to be used as a primer with Topcoat[®] Elastomeric Roofing Membrane) or Topcoat[®] Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -75 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Cellular or aggregate lightweight concrete

System Type E(1): Base sheet mechanically attached.

Deck: Structural Concrete or 18-22 ga. steel deck shall be secured 6" o.c. to structural supports spaced a maximum of 5 ft. on centers with 5/8" puddle welds.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet mechanically fastened as described below.

Fasteners: Drill-Tec™ Base Sheet Fasteners at a fastener spacing of 9" o.c. at the 2" wide side laps and 9" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -45 psf, See General Limitation #7)
Or
Drill-Tec™ Base Sheet Fasteners at a fastener spacing of 12" o.c. at the 2" wide side laps and 9" o.c. in three equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -45 psf, See General Limitation #7)
Or
Drill-Tec™ Locking Impact Nail fastened at a spacing of 9" o.c. at the 4" wide side laps and 9" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -60 psf, See General Limitation #7)
Or
Drill-Tec™ Base Sheet Fasteners spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -75 psf, See General Limitation #7)

Ply Sheet: Two or more plies of GAFGLAS® Ply 4 or GAFGLAS® FlexPly™ 6
Or
One or more plies of GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: See Fastening Above

Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Celcore Lightweight Insulating Concrete

System Type E(2): Base sheet mechanically attached.

Deck : Structural Concrete deck or Min. 22 ga., Type B steel decking over ¼" thick steel supports spaced max. 6 ft o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Steel deck is covered with a Celcore lightweight concrete pour consisting of a 1/8" slurry coat, min. 2" thick Holey Board and a min. 2" thick top coat.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet mechanically fastened as described below.

Fasteners: Drill-Tec™ Base Sheet Fasteners and plates fastened at a spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -60 psf (See General Limitation #7)



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Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell Lightweight Insulating Concrete

System Type E(3): Base sheet mechanically attached.

Deck : Min. 22 ga., Type B steel decking over ¼” thick steel supports spaced max. 6 ft o.c. attached 6” o.c. using min. 5/8” diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 18” o.c. using Traxx/1 fasteners. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8” slurry coat, min. 2” thick Holey Board and a min. 2” thick top coat.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #80 Ultima™ Base Sheet mechanically fastened as described below.

Fasteners: Drill-Tec™ Base Sheet Fasteners and plates fastened at a spacing of 7” o.c. at the 3" wide side laps and 7” o.c. in two equally spaced rows in the field of the base sheet.

Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -82.5 psf (See General Limitation #7)



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Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell Lightweight Insulating Concrete

System Type E(4): Base sheet mechanically attached.

Deck : Structural Concrete Deck or Min. 22 ga., Type B steel decking over ¼" thick steel supports spaced max. 5 ft. o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8" slurry coat, min. 1" thick Holey Board and a min. 2" thick top coat.

All General and System Limitations shall apply.

Fireboard: (Optional) Fireboard min ¼" Dens Deck® Roof Board or minimum ¼" Securock® Gypsum-Fiber Roof Board loose laid.

Base Sheet: Install one ply of Ruberoid® Mop Smooth, Ruberoid® Mop Granule, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ Granule with granular surfaces faced down with 4" heat welded side lap and mechanically fastened as described below.

Fasteners: Drill-Tec™ #12 Fasteners and Drill-Tec™ 3" Steel Plate fastened through lightweight concrete to the structural deck at a spacing of 12" o.c. at the 4" wide side laps and 12" o.c. in two equally spaced rows in the field of the base sheet.

Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 ply sheet or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -97.5 psf (See General Limitation #7)



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Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell (II Special Mix min 350 psi) with Zell-Crete Lightweight Insulating Concrete

System Type F(1): Base sheet adhered.

Deck : Structural Concrete Deck or Min. 22 ga., Type B steel decking over ¼" thick steel supports spaced max. 5 ft. o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Deck surface shall be treated with Zell-Erator and allowed to dry prior to pouring Lightweight concrete. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8" slurry coat, min. 2" thick Holey Board and a min. 2" thick top coat. Lightweight insulating deck shall be primed with ASTM D 41 at an application rate of 1-2 gal/sq. prior to the installation of membrane.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet loose laid dry over the deck and adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (Optional) One or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -112.5 psf (See General Limitation #9)



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LIGHTWEIGHT INSULATING CONCRETE SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 250 psi.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida Registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE